CLAIMS

What is claimed is:

1. A method of processing video data comprising the steps of:

accepting video data from a video source; and

storing video information associated with the video data as the video data is being accepted, the video information being stored as annotations to the video data.

2. The method of claim 1, wherein the video information comprises camera geometry information.

3. The method of claim 1, wherein the video information comprises camera pose information.

4. The method of claim 1, wherein the video information comprises source identification/description/illumination information.

5. The method of claim 1, wherein the video data comprises frame data obtained from an encoder.

6 The method of claim 1, wherein the video source comprises a video capture device.

7. The method of claim 5, further comprising gathering a current state of the frame data.

8. The method of claim 7, further comprising comparing the current state with the camera geometry information, the camera pose information and the source identification/description/illumination information of the frame data.

9. The method of claim 8, further comprising determining differential information from a result of the comparing step.

10. The method of claim 9, further comprising appending the differential information to the frame data.

11. An apparatus comprising:

a collector configured to collect video information to be associated with video data gathered from a video source; and

an annotator coupled to the collector, the annotator configured to annotate the video data with the video information.

12. The apparatus of claim 11, wherein the video information comprises one or more of: camera geometry; camera pose information; and source identification/description/illumination information.

13. The apparatus of claim 12, further comprising calibration software configured to generate the camera geometry information for the video data as the video data is being gathered by the video source and provide the generated camera geometry information to the collector.

14. The apparatus of claim 12, further comprising pose estimation software and configured to generate the camera pose information for the video data as the video data is being gathered by the video source and provide the generated camera pose information to the collector.

15. The apparatus of claim 12, further comprising an encoder configured to encode the video data and generate frame data as an input to the annotator.

16. The apparatus of claim 15, wherein the encoder forwards a current state of the frame data to a state storage device coupled to the encoder.

17. The apparatus of claim 16, further comprising a comparator configured to compare the current state with the video information of the frame data.

18. The apparatus of claim 17, further comprising a differential information generator coupled to the state storage device, the comparator and the encoder and configured to generate differential information from the result of the comparison performed by the comparator and forward the differential information to the encoder.

19. A computer readable media containing executable computer program instructions which when executed on a digital processing system causes the system to perform a method comprising:

accepting video data from a video source; and

storing video information for the video data as the video data is accepted, the video information being stored as annotation to the video data for later use.

20. The computer readable media of claim 19, wherein the video information is camera geometry information.

21. The computer readable media of claim 19, wherein the video information is camera pose information.

22. The computer readable media of claim 19, wherein the video information is source identification/description/illumination information.

23. The computer readable media of claim 19, wherein the video data is a frame data obtained from an encoder.

24. The computer readable media of claim 19, wherein the video source is a video capture device.

25. The computer readable media of claim 19, further comprising gathering current state of the frame data.

26. The computer readable media of claim 25, further comprising comparing the current state with the camera geometry information, the camera pose information and the source information of the frame data.

27. The computer readable media of claim 26, further comprising determining differential information from result of the comparing.

28. The computer readable media of claim 27, further comprising appending the differential information to the frame data.